

AMENDED CLAIMS

1. Packaging article existing either in the form of possibly retractable, flexible or rigid films, or other elements including in particular wires, tubes which are possibly formed, and sheets which are possibly cellular, from which it is possible to constitute a package, or in the form of pasty solids with a plastic character, at least one of the constituents of this packaging article including:

- 10       -       either at least one polymer which enters into its constitution to the extent of at least 50% by weight and a premix based on volatile corrosion inhibitors, the said polymer being chosen from those of the group comprising:
  - 15       -       polyolefins, including polyethylenes, polypropylene, polybutene and their copolymers with one or more unsaturated monomers including vinyl acetate, acrylic acid and its esters with alcohols having a short carbon chain,
  - 20       -       polyvinyl chloride and its copolymers, acrylic copolymers and their derivatives, and
  - 25       -       polyamides, polystyrenes, polycarbonates, polyesters, polyurethanes, rubbers including natural rubber, styrene-butadiene and polychloroprene,
- 30       -       or at least one insoluble filler chosen from the group comprising mineral fillers including chalks and carbonates, talcs, clays and silicas and a premix based on volatile corrosion inhibitors,

the said premix containing an effective quantity of at least one structuring agent consisting of a solid or pasty substance, chosen from the group comprising solid or pasty aliphatic and/or resinous compounds with a low melting point of between 40 and 110°C,

preferably between 50 and 90°C, by means of which the release of volatile corrosion inhibitors is limited to a maximum when the composition or premix is formed.

2. Packaging article according to claim 1, characterized in that it consists of single films or of assemblies of several elements, these assemblies being produced by employing any suitable method including stapling, crimping, thermoforming, skin-packing or the manufacture of blisters.

3. Packaging article according to claim 1 ~~or claim 2~~, characterized in that the premix comprises from 1 to 80%, preferably 20 to 60% by weight of at least one volatile corrosion inhibitor and 20 to 99%, preferably 40 to 80%, of at least one structuring agent consisting of a solid or pasty substance of which the melting point is 40 to 110°C, preferably 50 to 90°C.

4. Packaging article according to <sup>claim 1</sup> ~~one of claims 1 to 3~~, characterized in that in the premix, the solid or pasty structuring agent is chosen from the group of those comprising linear and/or only slightly branched mono- or polyfunctional aliphatic compounds with hydrocarbon chains having at least 10 carbon atoms.

5. Packaging article according to claim 4, characterized in that the structuring agent is chosen from the group comprising:

- saturated or unsaturated, possibly oxidized, mono- or dicarboxylic acids, their esters and their salts,

- phosphoric, sulfonic and phosphonic acids, their esters with alcohols and their salts of alkali metals, alkaline earths, zinc, aluminium and/or organic amines,

- cyclic or acyclic compounds of the group comprising lactones, ketones, aldehydes, amides and acetals,

- cyclic or acyclic, possibly polyalkoxylated, primary or secondary higher alcohols with a hydrocarbon chain having at least 10 carbon atoms,

- linear and/or only slightly branched aliphatic hydrocarbons, in particular paraffins and isoparaffins,

- polyolefins and their copolymers with low molecular masses of 3000 to 20000 g/mole,

- polyglycols, in particular polyethyleneglycols with a molecular mass of 2000 to 10000 g/mole.

6. Packaging article according to claim 1, characterized in that the structuring agent is chosen from the group comprising resinous compounds having a polymeric and/or cyclic structure and which may contain, in a minor proportion, aromatic derivatives and cyclic terpenes.

7. Packaging article according to <sup>claim 1</sup> ~~any one of claims 1 to 6~~, characterized in that the structuring agent is chosen from the group of those identified in Table A below and of which some are waxes of natural or synthetic origin:

**TABLE A**

Origin of structuring agent	Principal chemical nature of structuring agent	Name of structuring agent	Melting point (°C)	Density at 25°C ASTM D 1298	Penetration index at 25°C ASTM D1321
Natural	Ester (myricyl cirotate)	Carnauba wax	83-86	0.995	--
	Ester (myricyl palmitate)	Bees wax	62-65	0.955	--
Mineral	Paraffinic hydrocarbons (mixture)	Paraffin wax	50-60	0.900	15
	Isoparaffinic and naphthenic hydrocarbons	Microcrystalline wax	69	0.930	29
	Aliphatic hydrocarbons (mixture)	Petrolatum	70-72	0.910/ 20°C	43-45
Synthetic	Polyethylene	Polyethylene wax	88	0.930	6.5
	Oxidized isoparaffinic hydrocarbons	Oxidized microcrystalline wax	85	--	13
	Phosphoric ester of fatty alcohols C <sub>16</sub> /C <sub>18</sub>	-	83-89	0.998	--
	Polyethyleneglycol	Polyethylene-glycol 4000	57-59	1.112/ 99°C	--

A 8. Packaging article according to <sup>claim 1</sup> ~~any one of claims 1 to 7~~, characterized in that the premix includes at least one volatile corrosion inhibitor chosen from the group comprising:

5 - nitrogen-containing derivatives and in particular, on the one hand, aliphatic, aromatic, acyclic or cyclic amines, including dicyclohexylamine, cyclohexylamine, morpholine, diisopropylamine and benzylamine, their organic salts, including benzoates, carbamates, laurates, caprylates, succinates, or their inorganic salts including nitrites, nitrates, carbonates, phosphates, phosphites and, on the other hand, heterocyclic compounds  
10 including imidazole and its derivatives, triazoles and their derivatives, as well as hexamethylenetetramine,

- oxido nitrogen-containing derivatives including the alkali metal or alkaline earth salts of nitrous acid and

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- the benzoic derivatives of these metals such as sodium benzoate.

A 9. Use of the premix such as employed in <sup>claim 1</sup> ~~one of claims 1 to 8~~ for the production of the packaging article made of polymeric material.

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10. Use of packaging articles according to <sup>claim 1</sup> ~~one of claims 1 to 8~~ for the protection of metal parts against corrosion.

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